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EXAMINER

RASHID, MAHBUBUR

ART UNIT

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3657

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1-7 are canceled.

Claims 8, 11, 12 and 14 are amended.

Claims 15 and 16 are newly added.

### ***Claim Objections***

Claim 8 is objected to because of the following informalities: it is not clear how the air movement passage connects two of the air retention portions as disclosed in line 17 of the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

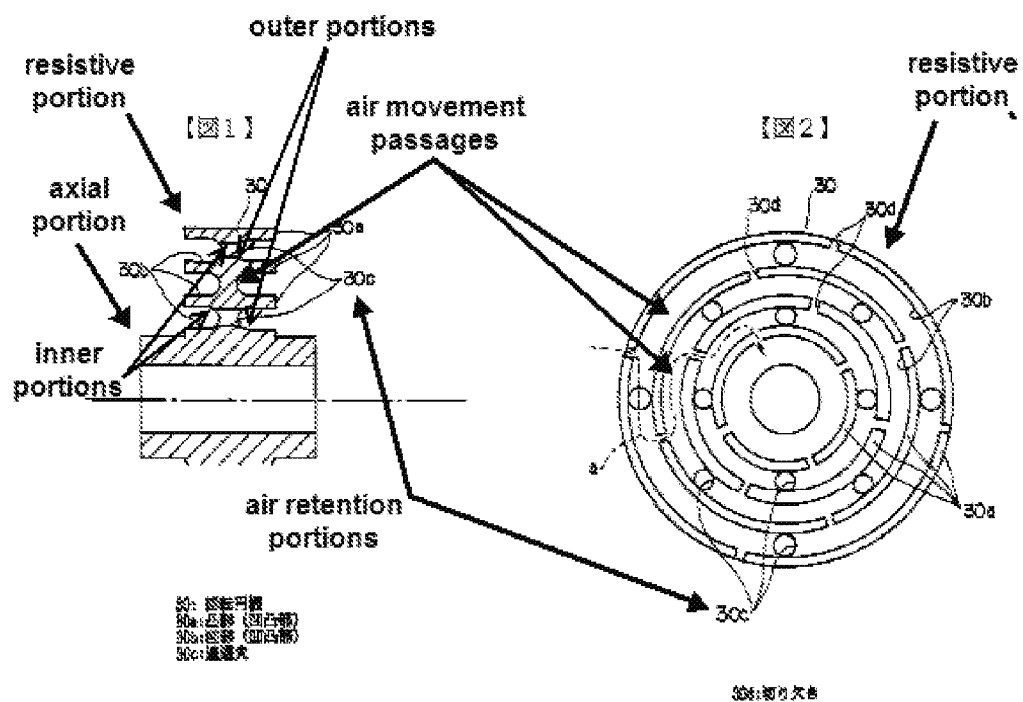
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

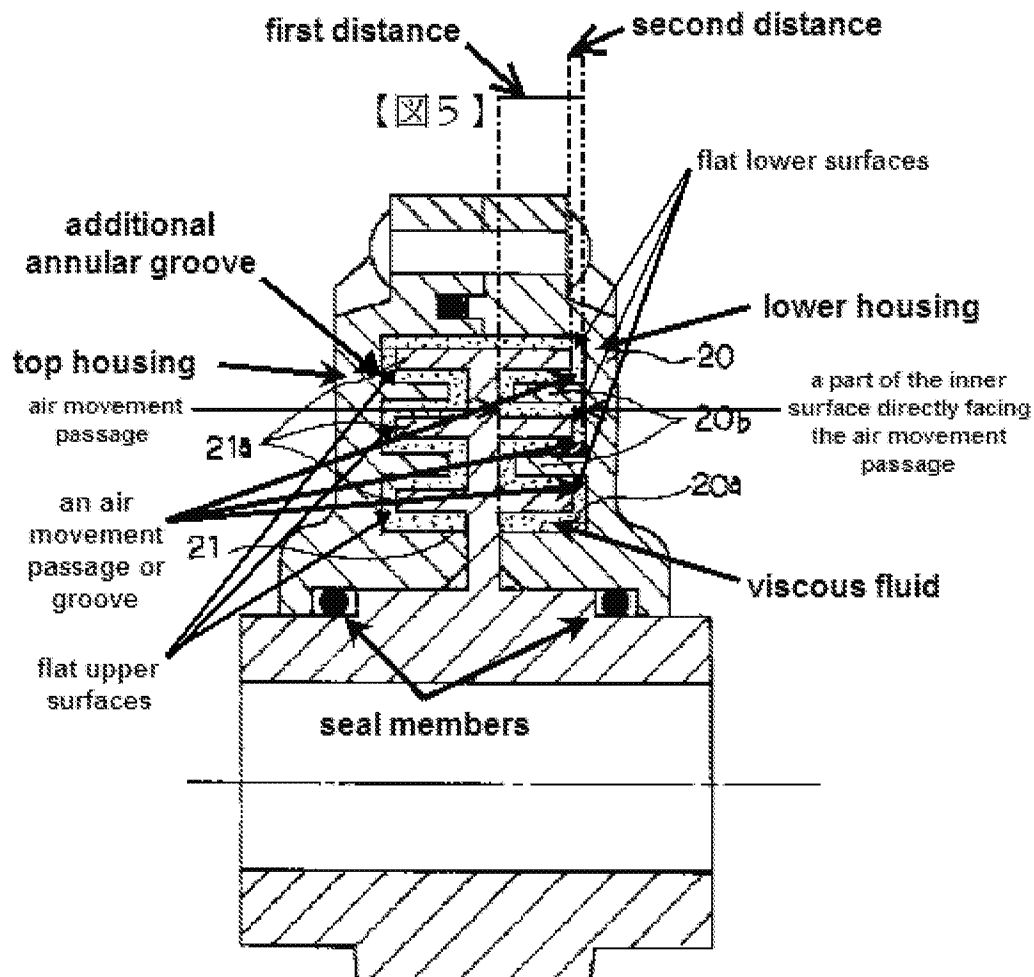
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 8-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ide Takanobu (JP 05-044760) in views of Sugawara et al. (US 4,938,322).





Regarding **claims 8-16**, Takanobu discloses a rotary damper comprising:

a housing (20);

a viscous fluid housed inside the housing (see fig. 5);

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a rotor (see fig. 1, (1)) disposed inside the housing and having an axial portion (21) projecting from the housing, and a circular resistive portion (30a) which moves through said viscous fluid inside said housing, said rotor (1) having a smooth outer periphery extending continuously without interruption (see figs. 1 and 2) and flat upper and lower surfaces without a projection (see 2<sup>nd</sup> figure above); and

a sealing member (see fig. 5, the top and bottom seals between 20 and 30) preventing said viscous fluid from leaking between said axial portion and said housing, and

wherein said resistive portion (30a) includes multiple air retention portions (30C) provided annularly and intermittently around the axial portion thereof, and the housing has air movement passage (see 2<sup>nd</sup> figure above) connecting two of the air retention portions.

Takanobu disclose all claimed elements as set forth above but fails to disclose the circumferential extension arc shape or an elongated through-bore of the air retention portion as claimed. However, Sugawara discloses a damper device (figs. 5a-5d) with a rotor (6) having air retention portion extending circumferentially in an arc shape or the portion being formed by elongated through-bore (6c). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the disc of Takanobu with the arc shaped air retention portion or the portions being formed by elongated through-bore as taught by Sugawara, because the arc shaped air retention portion being formed by elongated through-bore will accelerate the flow of viscous liquid to ensure a smooth movement of viscous liquid.

### ***Response to Arguments***

Applicant's arguments with respect to claims 8-16 have been considered but are moot in view of the new ground(s) of rejection.

Regarding flat upper and lower surfaces, JP '760 discloses flat upper and lower surfaces of the rotor without a projection and clearly shown in figs. 1 and 5 and the figures above.

Regarding the air movement passage, JP '760 discloses annular air movement passage (fig. 5 and figures above) that connects at least two of the air retention portions (30c) of the rotor.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHBUBUR RASHID whose telephone number is (571)272-7218. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/  
Primary Examiner, Art Unit 3657

/M. R./  
Examiner, Art Unit 3657